EMERSON RADIO

MODEL: 602

CHASSIS MODELS: 120072A, 120082A

An internal power line antenna is provided for FM reception in relatively strong signal areas. The line cord should be completely uncoiled for effective operation of this antenna. An external dipole antenna is recommended for maximum FM operation. To connect the dipole, remove the wire from the screw terminal at the rear of the chassis marked "A" and connect the dipole leads to "A" and "G".

NOTE: This service note covers Model 602. The information contained herein applies equally to similar models, including Models 600 and 616.

TYPE: Single band FM superheterodyne

FREQUENCY RANGE: Frequency modulation band—88-108 megacycles

INSTRUCTIONS FOR VOLTAGE AND RESISTANCE READINGS

1. Voltage readings are in volts and resistance readings in ohms unless otherwise specified.
2. D.C. voltage measurements are at 20,000 ohms per volt; a.c. voltages are measured at 1000 ohms per volt.
3. Socket connections are shown as bottom views.
4. Measured values are from socket pin to common negative.
5. Line voltage maintained at 117 volts for voltage readings.
6. Nominal tolerance on component values makes possible a variation of ± 15% in voltage and resistance readings.
7. Volume control at maximum, no signal applied, for voltage measurements.
8. Resistance readings in the B+ circuits may vary widely according to the condition of the filter condensers.

VOLTAGE READINGS

SYMBOL & TUBE	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	PIN 9
V1 (12BA7)	97 DC	0	0	38 AC	50 AC	0	0	0	96 DC
V2 (12BA6)	-0.5 DC	0	26 AC	38 AC	88 DC	88 DC	0	—	—
V3 (12BA6)	-0.5 DC	0	26 AC	13 AC	88 DC	88 DC	0	—	—
V4(12S8GT)	-0.3 DC	0	-0.4 DC	0	-0.3 DC	45 DC	13 AC	0	—
V5 (35B5)	0	6 DC	50 AC	84 AC	110 DC	90 DC	NC	—	—
V6 (35W4)	0	NC	84 AC	117 AC	113 AC	NC	118 DC	—	—

NC denotes "no connection."

RESISTANCE READINGS

SYMBOL & TUBE	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	PIN 9
V1 (12BA7)	70 K	22 K	0	38	50	0	0	0	50 K
V2 (12BA6)	2.2 meg.	0	25	38	60 K	60 K	0	—	—
V3 (12BA6)	2.2 meg.	0	25	12	55 K	55 K	0	—	—
V4(12S8GT)	660 K	0	32 K	0	660 K	610 K	12	0	—
V5 (35B5)	500 K	180	50	85	50 K	50 K	NC	—	—
V6 (35W4)	0	NC	85	120	160	NC	80 K	—	—

K denotes "kilohm" (1000 ohms); meg. means "megohm."